

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-21. (Canceled)

22. (Currently Amended) A method of making a multilumen catheter assembly, comprising the steps of:

forming a unitary catheter tube having a distal portion and a distal end portion terminating in a distal end, a proximal portion terminating in a proximal end, an outer wall having a smooth, curved and generally convex surface without ridges or grooves, a single longitudinal bisecting wall generally bisecting the unitary catheter tube, and together with the outer wall forming a first lumen and a second lumen, each of the first and the second lumens extending longitudinally through the unitary catheter tube;

splitting the unitary catheter tube longitudinally along the distal end portion of the unitary catheter tube, and along a length of the longitudinal bisecting wall to form a first distal end tube and a second distal end tube; and

bonding at least a portion of the first distal end tube to the second distal end tube to releasably attach the first and the second distal end tubes, whereby the multilumen catheter assembly assists prevention of leakage at a vessel entry site through use of the unitary catheter tube outer wall while providing length variability to separate and independent distal end tubes.

23. (Previously Presented) The method of claim 22, wherein an exterior of the unitary catheter has a generally oval shape in cross section.

24. (Previously Presented) The method of claim 23, wherein the first and the second lumens have a circular cross section.

25. (Previously Presented) The method of claim 22, wherein an exterior of the first and the second distal end tubes each have a generally semi-circular shape in cross section.

26. (Previously Presented) The method of claim 22, further comprising the step of finishing an exterior of the first and the second distal end tubes so that each has a generally semi-circular shape in cross section over a portion of a longitudinal length of the first and the second distal end tubes, the first and the second distal end tubes having a generally circular shape in cross section over a remaining portion of the longitudinal length.

27. (Previously Presented) The method of claim 26, wherein the first and the second distal end tubes are releasably attached by bonding over the portion of the longitudinal length where the first and the second distal end tubes have a generally semi-circular shape in cross section.

28. (Canceled)

29. (Previously Presented) The method of claim 22, wherein the first and the second distal end tubes are bonded to provide releasable attachment beginning at a point where the first and the second distal end tubes begin to extend from the unitary catheter tube and continuing over a proximal portion of their longitudinal lengths, and are separate over a distal portion of their longitudinal lengths to the distal end.

30. (Previously Presented) The method of claim 22, wherein, after splitting, a length of at least one of the first and the second distal end tubes is greater than a length of a remaining portion of the unitary catheter tube.

31. (Previously Presented) The method of claim 22, further comprising the step of grinding and polishing the first and the second distal end tubes to provide a generally smooth exterior surface to each of the first and second distal end tubes.

32. (Previously Presented) The method of claim 31, wherein at least a portion of a length of an exterior of each of the first and the second distal end tubes is circular in cross section after the grinding and polishing.

33. (Previously Presented) The method of claim 22, wherein forming the unitary catheter tube is by a heat molding process.

34. (Previously Presented) The method of claim 33, wherein the heat molding process is extrusion.

35. (Currently Amended) A method of making a multilumen catheter assembly, comprising the steps of:

forming a unitary catheter tube to have a distal portion and a distal end portion terminating in a distal end, a proximal portion terminating in a proximal end, an exterior having a smooth, curved and generally convex surface without ridges or grooves, a single longitudinal bisecting wall generally bisecting the unitary catheter tube, and together with the outer wall forming a first lumen and a second lumen, each of the first and the second lumens extending longitudinally through the unitary catheter tube;

splitting the unitary catheter tube longitudinally along the distal end portion, and along a length of the longitudinal bisecting wall to form a first distal end tube and a second distal end tube, thereby creating a point of transition between split and unsplit portions of the unitary catheter tube wherein a length of the split portion of the unitary catheter tube, defined as the length from the transition point to the distal end, is greater than a length of the unitary catheter tube from the proximal end to the transition point; and

releasably re-attaching the first and the second distal end tubes to one another along a partial portion of their longitudinal lengths, the first and the second distal end tubes being releasably re-attached from the transition point to a bonding point located between the transition point and the distal end, the first and the second distal end tubes being separate from the transition point to the distal end, whereby the first and the second distal end tubes are splittable by minimal force from the transition point to the bonding point and independent and free floating from the bonding point to the distal end, whereby the multilumen catheter assembly assists prevention of leakage at a vessel entry site through use of the unitary catheter tube outer wall while providing length variability to separate and independent distal end tubes.

36-65. (Canceled)

66. (Previously Presented) The method of claim 35, wherein releasably re-attaching the first and the second distal end tubes involves heat molding, adhering or ultrasonic welding.

67. (Previously Presented) The method of claim 35, wherein the releasably re-attaching the first and the second distal end tubes employs an adhesive having an adhesive

strength, relative to a material forming the first and the second distal end tubes, greater than a cohesive strength of the adhesive.

68. (Previously Presented) The method of claim 67, wherein the adhesive is applied as a partial or complete coating on one or both of outer walls of the first and the second distal end tubes, whereby when the tubes are pressed together, the outer walls adhere.

69. (Previously Presented) The method of claim 35, wherein the multilumen catheter assembly is a hemodialysis catheter assembly.

70. (Previously Presented) The method of claim 35, wherein the multilumen catheter assembly is adapted to remove and introduce bodily fluids, medicaments and other fluid solutions from and to a body.

71. (Previously Presented) The method of claim 35, wherein the unitary catheter tube is a single, flexible multilumen tube.

72. (Previously Presented) The method of claim 35, wherein forming the unitary catheter tube involves manufacturing by molding or extrusion.

73. (Previously Presented) The method of claim 35, wherein the terms distal and distal end refer to a direction closer to an insertion tip of the catheter and the terms proximal and proximal end refer to a direction away from the insertion tip of the catheter.

74. (Previously Presented) The method of claim 35, wherein the first and the second lumens extend longitudinally through a full length of the unitary catheter tube and the multilumen catheter assembly.

75. (Previously Presented) The method of claim 35, wherein splitting the unitary catheter tube involves sharp edge cutting over a pre-determined distance.

76. (Previously Presented) The method of claim 22, wherein bonding involves adhering the first distal end tube to the second distal end tube to releasably attach the first and the second distal end tubes.

77. (Previously Presented) The method of claim 76, wherein the releasable attachment of the first and the second distal end tubes employs an adhesive having an adhesive strength, relative to a material forming the first and the second distal end tubes, greater than a cohesive strength of the adhesive.

78. (Previously Presented) The method of claim 76, wherein adhering employs an adhesive applied as a partial or complete coating on one or both of outer walls of the first and the second distal end tubes, whereby when the tubes are pressed together, the outer walls adhere.

79. (Previously Presented) The method of claim 76, wherein adhering employs adhesive that includes properties causing the adhesive to adhere more strongly to the tubes than to itself, whereby application of opposing transverse forces to the distal end tubes causes the adhesive to lose cohesive strength and separate longitudinally along the catheter assembly without structurally altering the distal end tubes.

80. (Previously Presented) The method of claim 22, wherein the first distal end tube is bonded to the second distal end tube over an entire length of a shorter of the first and the second distal end tubes.

81. (Previously Presented) The method of claim 22, wherein the multilumen catheter assembly is a hemodialysis catheter assembly.

82. (Previously Presented) The method of claim 22, wherein the multilumen catheter assembly is adapted to remove and introduce bodily fluids, medicaments and other fluid solutions from and to a body.

83. (Previously Presented) The method of claim 22, wherein the unitary catheter tube is a single, flexible multilumen tube.

84. (Previously Presented) The method of claim 22, wherein forming the unitary catheter tube involves manufacturing by molding or extrusion.

85. (Previously Presented) The method of claim 22, wherein the terms distal and distal end refer to a direction closer to an insertion tip of the catheter and the terms proximal and proximal end refer to a direction away from the insertion tip of the catheter.

86. (Previously Presented) The method of claim 22, wherein the first and the second lumens extend longitudinally through a full length of the unitary catheter tube and the multilumen catheter assembly.

87. (Previously Presented) The method of claim 22, wherein splitting the unitary catheter tube involves sharp edge cutting over a pre-determined distance.

88. (Currently Amended) A method of making a multilumen catheter assembly, comprising the steps of:

forming a unitary catheter tube having:

an outer surface having a generally smooth, circular cross-sectional shape without ridges or grooves;

a distal portion terminating in a distal end and a proximal portion terminating in a proximal end; and

a first lumen and a second lumen separated therein by ~~an internal septum~~ a single longitudinal bisecting wall generally bisecting the unitary catheter tube,

wherein the first lumen and the second lumen each have a generally semi-circular

cross-sectional shape, and the first lumen, the second lumen and the ~~internal~~
septum longitudinal bisecting wall each extend longitudinally through a full
length of the unitary catheter tube;

splitting the unitary catheter tube longitudinally along the distal portion, and along
a length of the longitudinal bisecting wall to form a first distal end tube and a second
distal end tube each having an outer surface generally semi-circular in cross-sectional
shape; and

releasably attaching at least a portion of an exterior surface of the first distal end
tube to a respective exterior surface of the second distal end tube, whereby the first and
the second distal end tubes are thereafter splittable by minimal force, whereby the
multilumen catheter assembly assists prevention of leakage at a vessel entry site through
use of the unitary catheter tube outer surface configuration while providing length
variability to separate and independent distal end tubes.

89. (Previously Presented) The method of claim 88, wherein the unitary catheter tube
is split a distance of about 4 cm to about 9 cm extending along the distal portion from the distal
end.

90. (Previously Presented) The method of claim 88, further comprising the step of,
after the step of splitting the unitary catheter tube, cutting a length of the first distal end tube so
that the first distal end tube is shorter than the second distal end tube.

91. (Previously Presented) The method of claim 90, wherein the shorter, first distal
end tube is between about 5 cm to 6 cm in length.

92. (Previously Presented) The method of claim 90, wherein the first distal end tube is between about 3 cm to 4 cm shorter than the second distal end tube.

93. (Previously Presented) The method of claim 88, wherein releasably attaching the first and the second distal end tubes involves heat molding, adhering or ultrasonic welding.

94. (Previously Presented) The method of claim 88, wherein the releasably attaching the first and the second distal end tubes employs an adhesive having an adhesive strength, relative to a material forming the first and the second distal end tubes, greater than an cohesive strength of the adhesive.

95. (Previously Presented) The method of claim 94, wherein the adhesive is applied as a partial or complete coating on one or both of outer walls of the first and the second distal end tubes, whereby when the tubes are pressed together, the outer walls will adhere.

96. (Previously Presented) The method of claim 88, wherein the multilumen catheter assembly is a hemodialysis catheter assembly.

97. (Previously Presented) The method of claim 88, wherein the multilumen catheter assembly is adapted to remove and introduce bodily fluids, medicaments and other fluid solutions from and to a body.

98. (Previously Presented) The method of claim 88, wherein the unitary catheter tube is a single, flexible multilumen tube.

99. (Previously Presented) The method of claim 88, wherein forming the unitary catheter tube involves manufacturing by molding or extrusion.

100. (Previously Presented) The method of claim 88, wherein the terms distal and distal end refer to a direction closer to an insertion tip of the catheter and the terms proximal and proximal end refer to a direction away from the insertion tip of the catheter.

101. (Previously Presented) The method of claim 88, wherein splitting the unitary catheter tube involves sharp edge cutting over a pre-determined distance.

102. (Previously Presented) A method of making a multilumen catheter assembly, comprising the steps of:

forming a unitary catheter tube to have a distal portion terminating in a distal end, a proximal portion terminating in a proximal end, an outer wall comprising an outer surface having a cross-section defining a shape that is continuously convex at every point of the shape, and a single, longitudinal planar wall generally bisecting the unitary catheter tube along a longitudinal plane to form at least first and second lumens having generally equal cross-sectional areas, the first and second lumens extending longitudinally through the unitary portion on opposite sides of the longitudinal planar wall;

splitting a portion of the unitary catheter tube longitudinally by slicing a portion of a length of the single, longitudinal planar wall along the longitudinal plane to form a first distal end tube and a second distal end tube, thereby creating a point of transition between split and unsplit portions of the unitary catheter tube, wherein a length of the split portion of the unitary catheter tube from the transition point to the distal end is greater than a length of the unitary catheter tube from the proximal end to the transition point; and

releasably bonding the first and the second distal end tubes to one another along a partial portion of their longitudinal lengths, wherein the first and the second distal end tubes are releasably bonded from the transition point to a bonding point located between the transition point and the distal end, wherein the first and the second distal end tubes

are splittable by minimal force from the transition point to the bonding point, and wherein the first and the second distal end tubes are independent and free floating from the bonding point to the distal end.

103. (Previously Presented) The method of claim 102, wherein splitting the portion of the unitary catheter tube longitudinally by slicing the portion of the length of the single, longitudinal planar wall further comprises:

cutting, using a sharp edge, the portion of the length of the single, longitudinal planar wall along the longitudinal plane to bisect the portion of the length of the longitudinal planar wall to form the first and second distal end tubes.

104. (Previously Presented) The method of claim 103, wherein releasably bonding the first and the second distal end tubes further comprises applying, to the partial portion of the longitudinal lengths of the first and second distal end tubes, an adhesive having an adhesive strength, relative to a material forming the first and the second distal end tubes, greater than a cohesive strength of the adhesive.

105. (Previously Presented) The method of claim 104, wherein releasably bonding the first and the second distal end tubes further comprises:

applying the adhesive as a partial or complete coating on one or both of outer walls of the first and the second distal end tubes; and

pressing the end tubes together to adhere the outer walls of the first and second distal end tubes to one another.